



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/691,571

10/24/2003

Shigeru Nemoto

244423US2

6949

22850

7590

10/17/2008

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

VU, QUYNH-NHU HOANG

ART UNIT

PAPER NUMBER

3763

NOTIFICATION DATE

DELIVERY MODE

10/17/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/691,571	NEMOTO, SHIGERU	
	<b>Examiner</b>	<b>Art Unit</b>	
	QUYNH-NHU H. VU	3763	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,6-13 and 16-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,14 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/24/03, 10/3/05 &amp; 4/7/08</u> .                          | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 3763

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of Group I, Species B (claims 1, 5, **13**, 14) in the reply filed on 7/2/08 is acknowledged.

As noted that claim 13 denotes for Fig. 13, which is non-elected species. Therefore, claim 13 will not be examined.

Because claim 5 depends on claim 2 and claim 15 depends on claim 14. Therefore, Claims 1-2, 5, 14-15 will be examined also.

Claims 3-9, 11, 16-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group I and other species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/2/08.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "quantity calculating means for calculating an injected quantity of the liquid as the area of a chart portion surrounded by said injection graph and said horizontal axis" is vague. Examiner does not understand what Applicant mean here?

Beside that, Examiner believes claim 5 denoted in Fig. 15 which is unelected Species. Examiner requests Applicant clarify about this point. If claim 5 is belonging to Fig. 15, therefore, claim 5 must be withdrawn as original election.

Art Unit: 3763

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Bae et al. (US 6,055,985).

Bae discloses a liquid injector comprising: image displaying means for displaying a plotting chart image having a vertical axis and a horizontal axis (Figs. 1-10B). In order to make the graph image display in Figs. 1-10A, the device must be including of graph entering means for accepting an input action to enter an injection graph having chronologically changing injection conditions into the displayed plotting chart image; graph storing means for storing data of the entered injection graph, for example, it can store the data and make another two or three or many different curve or graphics in the same chart; graph displaying ; graph displaying means for displaying an image of the entered injection graph whose date is stored on said displaying plotting chart image; and injection control means for controlling operation of the injection performing means in real time according to the entered injection graphs.

Regarding claim 2, a times measuring means; said image displaying means comprising means for displaying said plotting chart image whose vertical axis represents liquid injection rates and horizontal axis represent liquid injection times (Figs. 3 & 5A); said graph entering means comprising means for accepting an input action to enter said injection graph which represents a liquid injection rata at each liquid injection time into said plotting chart image; said injection control means comprising means for controlling operation of said injection performing means in real-time according to the measured time and said entered injection graph (col. 11, lines 25+).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3763

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bae et al.

Regarding claim 5, as best as understood, Bae discloses the invention substantially as claimed.

Bae does not show the graphic between the quantity to be injected of liquid as horizontal axis, and the liquid injection rate as vertical axis.

Regarding claims 14-15, Bae discloses the invention substantially as claimed. Bae further discloses that the injection performing including a desired interval of an injection routine (claims 1 or 9 of Bae). As interval time, the injection routine or injection pattern must be interrupted or inactivated period. Bae does not clearly performing or entering the period for interrupting the injection of the liquid into the displayed injection graph.

Since Bea is able to bring up the date into the graphic, therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to try or modify the device of Bea with graphic as in claims 5, 14-15 into the display is for the purpose of intending use.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh-Nhu H. Vu whose telephone number is 571-272-3228. The examiner can normally be reached on 6:00 am to 3:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas D Lucchesi/  
Supervisory Patent Examiner, Art Unit 3763

Quynh-Nhu H. Vu  
Examiner  
Art Unit 3763